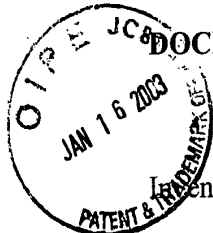


1631



DOCKET NO.: IBIS0002-100

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventors: Ecker, Griffey, Sampath, Hofstadler, McNeil, and Crooke

Serial No.: 09/891,793

Examiner: Not Yet Determined

Filing Date: June 26, 2001

Art Unit: Not Yet Determined

Title: Secondary Structure Defining Database And Methods For Determining Identity And Geographic Origin Of An Unknown Bioagent Thereby

Assistant Commissioner for Patents
Washington, DC 20231

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Plunkett
2/10/03

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JAN 17 2003

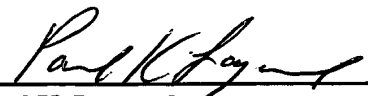
TECH CENTER 1600/2900

Sir:

**COMMUNICATION FORWARDING POWER OF ATTORNEY WITH
REVOCATION AND STATEMENT UNDER 37 CFR 3.73(b)**

All previous powers of attorney or authorizations of agent given in the above-identified application have been revoked and subsequently appointed to practitioners at Customer No. 34138 pursuant to the Power Of Attorney With Revocation And Change Of Correspondence Address, a copy of which is enclosed herewith. Also enclosed is a copy of Table A identifying all pertinent applications, the Statement Under 37 CFR 3.73(b), and a copy of the assignment filed in the above-identified application.

Respectfully submitted,


Paul K. Legaard
Registration No. 38,534

Date: 31 December 2002

COZEN O'CONNOR
1900 Market Street
Philadelphia, PA 19103-3508
Telephone: (215) 665-6914
Facsimile: (215) 701-2141

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Assistant Commissioner for Patents
Washington, DC 20231

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Sir:

**POWER OF ATTORNEY WITH REVOCATION AND
CHANGE OF CORRESPONDENCE ADDRESS**

TECH CENTER 1600/2900

I hereby revoke all previous powers of attorney or authorizations of agent given in the applications identified in Table A attached hereto, and appoint

☒ Practitioners at Customer Number: 34138



as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please change the Correspondence Address for all applications identified in Table

A to:

☒ Practitioners at Customer Number: 34138

I am the:

☐ Applicant/Inventor.

☒ Assignee of record of the entire interest. (A statement under 37 CFR 3.73(b) is enclosed.)

Respectfully submitted,
ISIS PHARMACEUTICALS, INC.

Date: 12-6-02

By: _____

Name: B. Lynne Parshall
Title: Executive Vice President

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Assistant Commissioner for Patents
Washington, DC 20231

Sir:

STATEMENT UNDER 37 CFR 3.73(b)

Applicant, **ISIS Pharmaceuticals, Inc.**, a corporation, states that it is:

☒ the assignee of the entire right, title, and interest of the applications identified in Table A attached hereto.

The extent (by, percentage) of its ownership interest is **100%** in the patent applications identified in Table A by virtue of:

☒ a copy of the pertinent assignment from the inventor(s) of the patent applications identified in Table A is enclosed herewith.

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Respectfully submitted,
ISIS PHARMACEUTICALS, INC.

Date: 12-6-02

By: 

Name: B. Lynne Parshall
Title: Executive Vice President

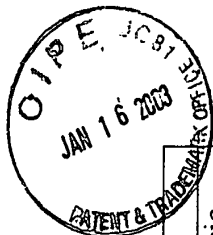


TABLE A

[illegible]



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MAY 28 2002

JWIC (KS)

MAY 20, 2002

PTA RECEIVED

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WWKMN

Commissioner for Trademarks
Arlington, VA 22202-3513
www.uspto.gov

WOODCOCK WASHBURN LLP
PAUL K. LEGAARD
ONE LIBERTY PLACE
46TH FLOOR
PHILADELPHIA, PA 19103-7301

MAY 28 2002

Woodcock Washburn Kurtz
Mackiewicz & Norris LLP



102032518A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

1615-0368

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 03/11/2002

REEL/FRAME: 012706/0435
NUMBER OF PAGES: 9

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:
ECKER, DAVID J.

DOC DATE: 11/16/2001

ASSIGNOR:
GRIFFEY, RICHARD H.

DOC DATE: 12/05/2001

ASSIGNOR:
SAMPATH, RANGARAJAN

DOC DATE: 11/16/2001

ASSIGNOR:
HOFSTADLER, STEVEN A.

DOC DATE: 12/20/2001

ASSIGNOR:
MCNEIL, JOHN

DOC DATE: 12/06/2001

ASSIGNOR:
CROOKE, STANLEY T.

DOC DATE: 11/16/2001

ASSIGNEE:
ISIS PHARMACEUTICALS, INC.
2292 FARADAY AVENUE
CARLSBAD, CALIFORNIA 92008

RECEIVED
JAN 17 2002
TECH CENTER 1615-0368

CONFIDENTIAL TO CLIENT

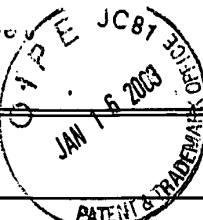
ON 6/14/02

012706/0435 PAGE 2

SERIAL NUMBER: 09891793
PATENT NUMBER:

FILING DATE: 06/26/2001
ISSUE DATE:

SHAREILL COLES, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS



03-27-2002



102032518

To The Honorable Commissioner of Patents

the attached original documents or copy thereof.

1. Name of conveying party(ies):

David J. Ecker

First Assignor

11/16/01

Date of Execution

Richard H. Griffey

Second Assignor

12/05/01

Date of Execution

Rangarajan Sampath

Third Assignor

11/16/01

Date of Execution

Steven A. Hofstadler

Fourth Assignor

12/20/01

Date of Execution

John McNeil

Fifth Assignor

12/06/01

Date of Execution

Stanley T. Crooke

Sixth Assignor

11/16/01

Date of Execution

Additional name(s) of conveying party(ies) attached? () YES (X) NO

2. Name and address of receiving party(ies):

Name: ISIS Pharmaceuticals, Inc.

Street Address: 2292 Faraday Avenue

City: Carlsbad

State California

ZIP 92008

Additional name(s) & address attached? () YES (X) NO

3. Nature of Conveyance (check only one):

(X) New Assignment

() Merger

() License Agreement

() Security Agreement

() Change of Name

() Other:

() Cross-reference of Assignment filed in United States

Application No. ___/___/___, recorded on ___ at

Reel No. ___ and Frame No. ___

4. Identification of Application number(s), patent number(s) OR date of execution of application to which assignment refers:

Application Nos.:

09/891,793

Patent Nos.:

Date application was signed by the first
named executing inventor(Fill-in this date only if assignment is
filed together with a new application)5. Name and address of party to whom correspondence
concerning documents should be mailed:

Name: Paul K. Legaard

WOODCOCK WASHBURN LLP

One Liberty Place - 46th Floor

Philadelphia, Pennsylvania 19103-7301

215-568-3100

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41):.....\$40.00

(X) Enclosed

() Authorized to be charged to Deposit Account

Number 23-3050

8. Please charge any deficiency or credit any
overpayment to Deposit Account Number 23-3050

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Paul K. Legaard/38,534

Name of Person Signing/Reg. No.

Signature

Date

Total number of pages including cover sheet, assignment document and additional pages attached thereto: 9

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks

Box Assignments

Washington, D.C. 20231

03/26/2002 DBYRNE 00000128 09891793

01 FC:581

40.00 CP

ASSIGNMENT

WHEREAS, I/we, **David J. Ecker of Encinitas, California, Richard H. Griffey of Vista, California, Rangarajan Sampath of San Diego, California, Steven A. Hofstadler of Oceanside, California, John McNeil of La Jolla, California and Stanley T. Crooke of Carlsbad, California** has/have invented a certain invention entitled **A SECONDARY STRUCTURE DEFINING DATABASE AND METHODS FOR DETERMINING IDENTITY AND GEOGRAPHIC ORIGIN OF AN UNKNOWN BIOAGENT THEREBY**, for which I/we have made an application for Letters Patent of the United States, said application having been filed **June 26, 2001** and assigned Application No. **09/891,793**; and

WHEREAS, **ISIS Pharmaceuticals, Inc.** hereinafter referred to as the assignee, of 2292 Faraday Avenue, Carlsbad CA, a corporation of Delaware, is desirous of acquiring the entire right, title and interest in and to the said inventions or improvements and in and to the said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in any and all countries:

NOW, THEREFORE, for and in consideration of the sum of One Dollar (\$1.00) to each of us in hand paid by said assignee, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said assignors, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over to said assignee, the entire right, title and interest in and to said inventions or improvements and said application and any and all continuations, divisions and renewals of and substitutes for said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in the United States and any and all other countries, and any reissue or reissues or extension or extensions of said Letters Patent, and assign to and authorize said assignee, to file in our names applications for Letters Patent in all countries, the same to be held and enjoyed by said assignee, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said

Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by us had this assignment, sale and transfer not been made.

AND we hereby covenant that we have full right to convey the entire interest herein assigned, and that we have not executed and will not execute any agreement in conflict herewith, and we further covenant and agree that we will each time request is made and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said inventions or improvements, said application and said Letters Patent to said assignee, its successors, assigns, nominees, or legal representatives, and each of us agrees to communicate to said assignee or to its nominee all known facts respecting said inventions or improvements, said application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers to execute all disclaimers and divisional, continuing, reissue and foreign applications, to make all rightful oaths, and generally to do everything possible to aid said assignee, its successors, assigns, nominees and legal representatives to obtain and enforce for its or their own benefit proper patent protection for said inventions or improvements in any and all countries.

AND we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid, to issue to said assignee, as assignee of the entire right, title and interest, any and all Letters Patent for said inventions or improvements, including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this assignment.

IN WITNESS WHEREOF, we have hereunto set our hands and seals.

Dated: 11-16, 20 01

David J. Ecker
DAVID J. ECKER

State of California)
)
County of San Diego) ss.

On this 16th day of NOVEMBER, 2001, before me, the undersigned, a Notary Public for the state, personally appeared **DAVID J. ECKER**, personally known to me/~~proved to me on the basis of satisfactory evidence~~ to be the person who subscribed the foregoing Assignment and acknowledged to me that ~~he/she~~ executed the same in ~~his/her~~ authorized capacity, and that by ~~his/her~~ signature on the Assignment the person, or the entity on behalf of which the person acted, executed the Assignment.

WITNESS my hand and official seal.



Lane B.D. Schwartz
Signature of Notary

Dated: December, 2001Richard H. Griffeey
RICHARD H. GRIFFEY

State of California)
)
County of San Diego) ss.

On this 5th day of December, 2001, before me, the undersigned, a Notary Public for the state, personally appeared **RICHARD H. GRIFFEY**, personally known to me/~~proved to me on the basis of satisfactory evidence~~ to be the person who subscribed the foregoing Assignment and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the Assignment the person, or the entity on behalf of which the person acted, executed the Assignment.



WITNESS my hand and official seal.

Lane B.D. Schwartz
Signature of Notary

PATENT

Rang Sampath
RANGARAJAN SAMPATH

On this 16th day of November, 2021, before me, the undersigned, a Notary Public for the state, personally appeared **RANGARAJAN SAMPATH**, personally known to me/~~proved to me on the basis of satisfactory evidence~~ to be the person who subscribed the foregoing Assignment and acknowledged to me that ~~he/she~~ executed the same in ~~his/her~~ authorized capacity, and that by ~~his/her~~ signature on the Assignment the person, or the entity on behalf of which the person acted, executed the Assignment.



WITNESS my hand and official seal.

Signature of Notary

Dated: 12.20, 2001

Steven A. Hofstadler
STEVEN A. HOFSTADLER

State of California)
)
County of San Diego) ss.

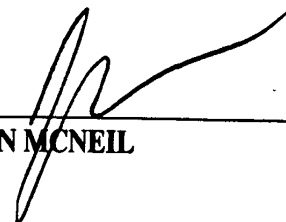
On this 20th day of December, 2001, before me, the undersigned, a Notary Public for the state, personally appeared **STEVEN A. HOFSTADLER**, personally known to me/~~proved to me on the basis of satisfactory evidence~~ to be the person who subscribed the foregoing Assignment and acknowledged to me that ~~he/she~~ executed the same in ~~his/her~~ authorized capacity, and that by ~~his/her~~ signature on the Assignment the person, or the entity on behalf of which the person acted, executed the Assignment.



WITNESS my hand and official seal.

[Signature]
Signature of Notary

Dated: Dec 06, 2001



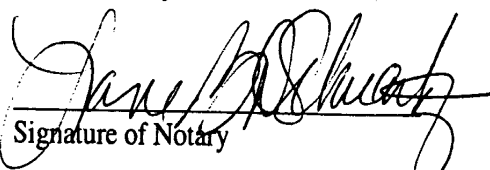
JOHN MCNEIL

State of California)
)
County of San Diego) ss.

On this 6th day of December, 2001, before me, the undersigned, a Notary Public for the state, personally appeared **JOHN MCNEIL**, personally known to me/~~proved to me on the basis of satisfactory evidence~~ to be the person who subscribed the foregoing Assignment and acknowledged to me that ~~he/she~~ executed the same in ~~his/her~~ authorized capacity, and that by ~~his/her~~ signature on the Assignment the person, or the entity on behalf of which the person acted, executed the Assignment.



WITNESS my hand and official seal.



Signature of Notary

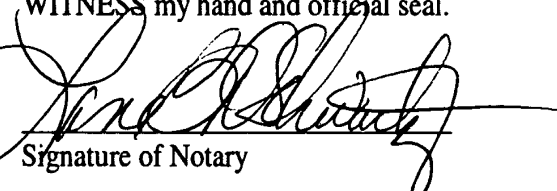
Dated: 11/16, 2001
STANLEY T. CROOKE

State of California)
)
County of San Diego) ss.

On this 16th day of November, 2001, before me, the undersigned, a Notary Public for the state, personally appeared **STANLEY T. CROOKE**, personally known to me/~~proved to me on the basis of satisfactory evidence~~ to be the person who subscribed the foregoing Assignment and acknowledged to me that ~~he/she~~ executed the same in ~~his/her~~ authorized capacity, and that by ~~his/her~~ signature on the Assignment the person, or the entity on behalf of which the person acted, executed the Assignment.



WITNESS my hand and official seal.


Signature of Notary